ADOPTING AN LDI APPROACH THROUGHOUT THE INVESTMENT VALUE CHAIN

LESSON LEARNT FROM EUROPEAN INSURERS

By the Insurance & LDI Solutions Team

The insurance business model is fundamentally based on underwriting and managing risks: insurance companies are contractually bound to meet specific obligations and as such structurally driven by liabilities.

The unchartered market environment experienced in the last few years, exacerbated by the introduction of the new Solvency II regime, has acted as an additional catalyst, leading even the most reluctant insurers to acknowledge the need for a holistic approach to their balance sheet. Insurance asset managers have therefore started to develop tools deployable at different stages of the investment value chain to face such a transformational framework.

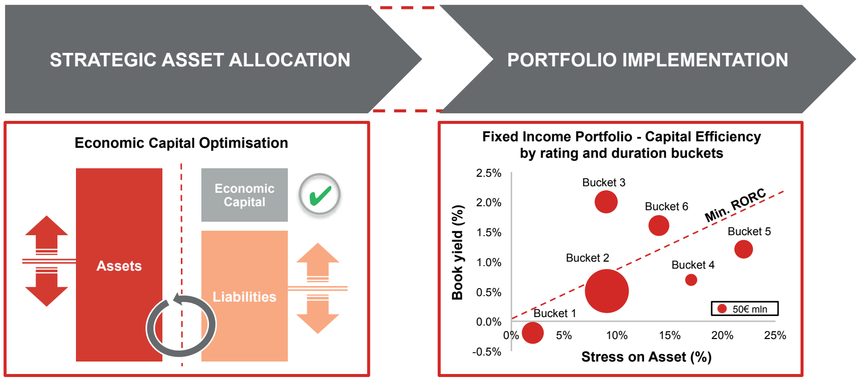
Adjusting for the relevant regulatory setting and specific circumstances, this tool kit – initially designed to meet requirements specific to insurers only – can be significantly impactful in the way other Liability-Driven investors select and manage their assets.

STEP 1: STRATEGIC ASSET ALLOCATION – OBVIOUSLY NECESSARY, BUT IS IT SUFFICIENT?

The Strategic Asset Allocation (SAA) represents the first and arguably the most important step in aligning targets and constraints of the investment portfolio to the specificities of the liabilities' structure.

Simple immunisation techniques would not be able to serve the purpose in such a complex business model. Thanks to the Liability-Driven footprint of our Group, Generali Investments has in place advanced tools and practices to deal with all the additional layers of complexity – most common to all Generali Group companies, some idiosyncratic.

In order to drive the decision making process, the investment framework leading to the final SAA must take into account several Key Performance Indicators and Key Risk Indicators ignored by standard optimisation models. Asset performance projections have to keep track of the evolution of relevant local Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) accounting measures under different economic scenarios. On the other hand, liability inputs incorporate actuarial assumptions and other key characteristics of the business which cannot be neglected - such as minimum guaranteed rates, additional statutory reserves and forward-looking assumptions on new production. The two sides of the balance sheet interact with each other through the modelling of management actions, where profit sharing mechanisms and targets setting take place. In order to achieve efficient SAA weights, the optimisation model must replicate this process by the means of a recursive approach targeting a measure of asset surplus. In our case, this is achieved applying a genetic algorithm that optimises economic capital as defined according to Solvency II.



Source: Generali Investments Europe S.p.A. Società di gestione del risparmio, as at June 2018

STEP 2: PORTFOLIO IMPLEMENTATION – CAN IT ADD VALUE?

Whilst the definition of an appropriate asset allocation represents a crucial step towards an efficient portfolio, significant value can also be extracted from the security selection process – provided it embeds the relevant constraints.

At Generali Investments, we manage the asset portfolios of all our Group insurance companies, each with specific goals and requirements. Besides the implementation of investment strategies hedging liabilities' risk exposures, we have engineered a set of proprietary Solvency II optimisation tools that are available to all portfolio managers in real time and enable them to allocate capital efficiently.

For the Fixed Income portfolio, the efficient frontier module computes for each input security the Credit Risk Charges under both Standard Formula and the applicable Internal Model. Once filtered by such metrics, the investable universe is then screened under our engine, which identifies the optimal portfolio in terms of capital efficiency on a Return on Required Capital (RORC) basis. Our model specification allows for wide flexibility in terms of the constraints imposed, ranging from credit limits and cashflow matching targets to asset allocation boundaries and ad hoc requirements. In addition, impact on profits & losses, book yields and other accounting measures are managed in the process.

Such tools have also several practical applications in portfolio managers' day-by-day activity. For example, the relative value analysis of fixed income securities issued in the primary market enables us to rank them by capital consumption, supporting our investment decisions. From established market indices instead, we can analyse the respective constituent universe and identify investable sub-portfolios that are effectively "super-efficient benchmarks".

BEYOND INSURANCE: A WIDE(R) SET OF APPLICATIONS

The whole architecture of our tool kit has been designed with the primary objective of being adaptable and fully customisable. Only committing resources to its constant evolution, we can keep the pace with changing regulation, new standards and upgraded protocols. Only adopting a flexible framework, we can accommodate the range of requirements from our clients.

We have thereby tested and stretched our tool kit to support our portfolio management activity for every investor subject to some form of constraints – financial, statutory, regulatory or solely commercial they may be – extracting valuable insights. These investors, either aware or not of their Liability Driven nature, can benefit considerably from a bespoke optimisation process, from SAA to advanced portfolio implementation. This said, we remain nonetheless fundamental believers in active discretionary portfolio management: the added value these tools can provide is a function of the level of expertise of the users. All the interdependencies in the investment process, which is far from mechanically driven and deterministic, are not at all trivial. The good news is that the experience and know-how of portfolios managers, who have been managing over the years insurance assets on behalf of multinational companies subject to different regulatory and business regimes, cannot be replaced, but probably enhanced.

GENERALI INVESTMENTS

To find out more please visit our website www.generali-investments.com or contact Insurance&LDISolutions@generali-invest.com